

09153964-091698
869T60-4985T60

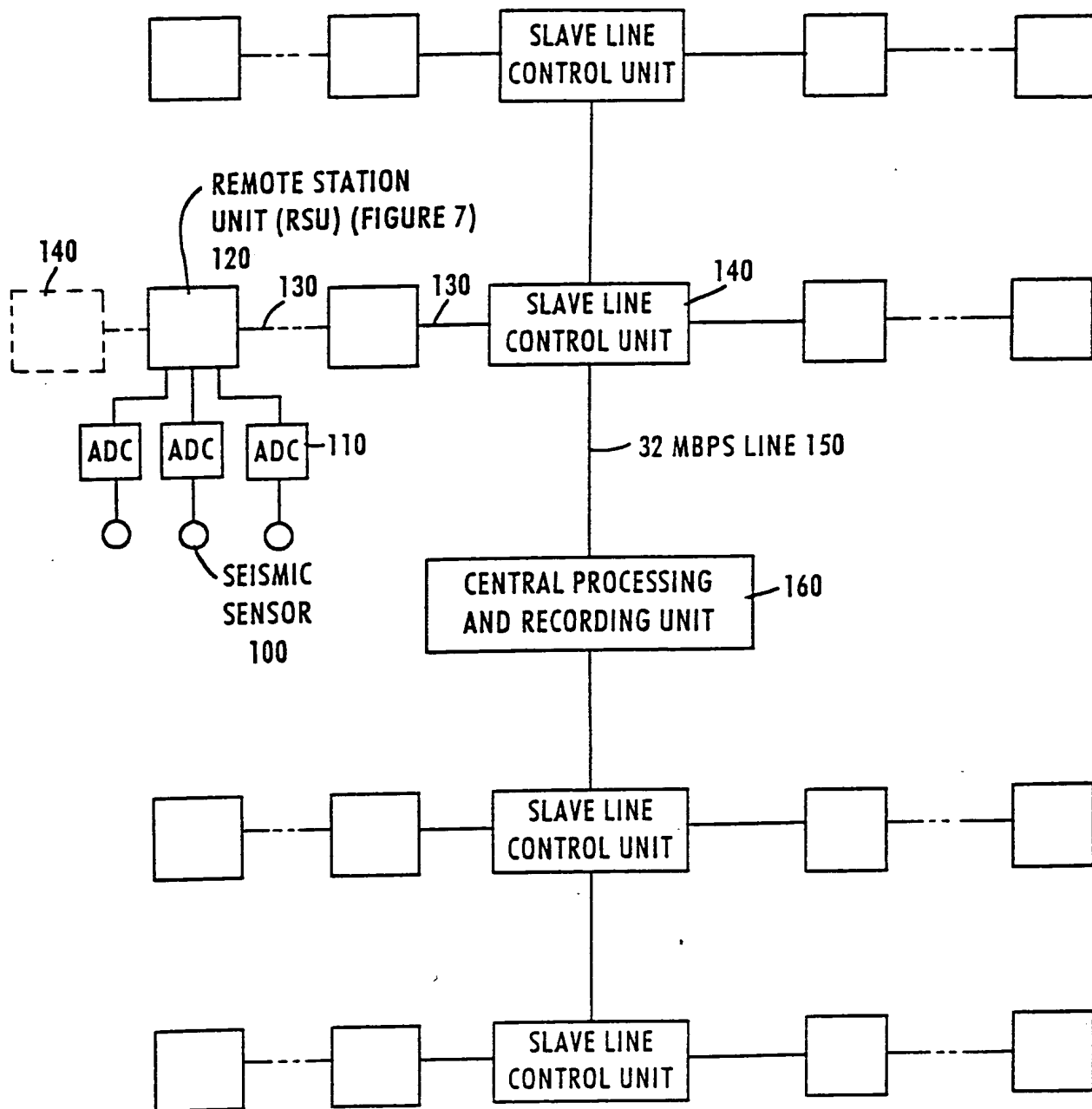


Figure 1

53hup

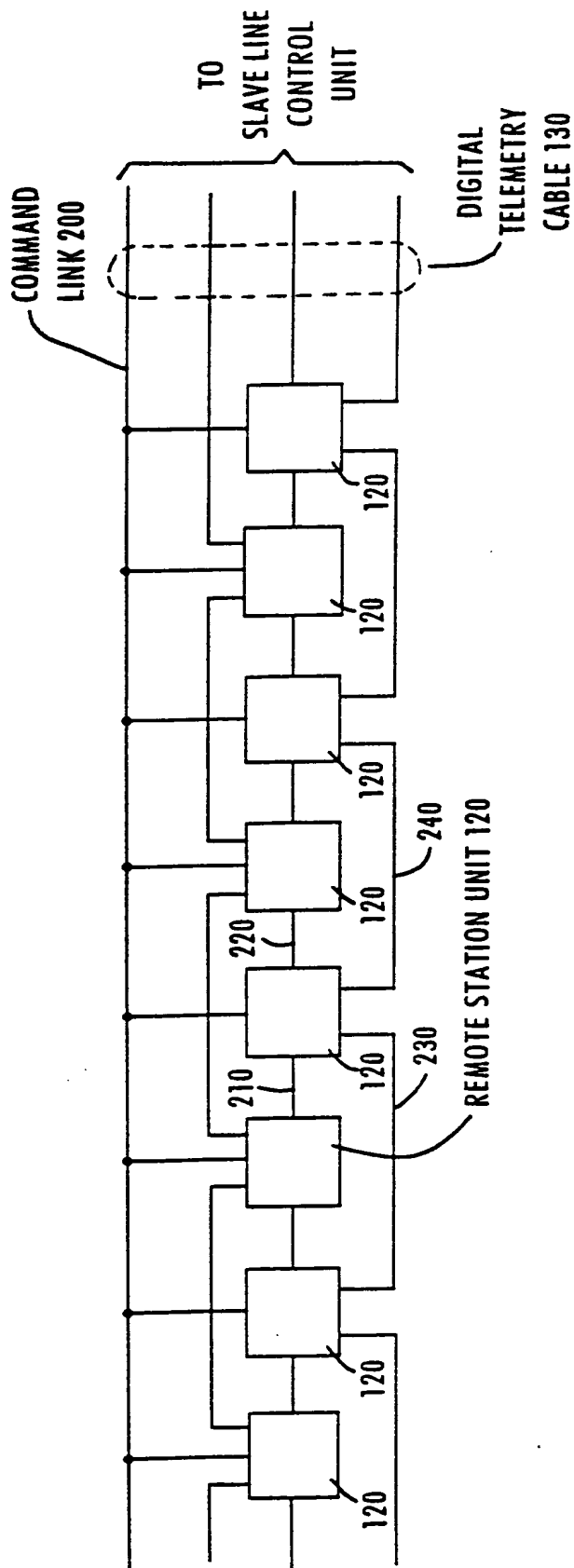


Figure 2

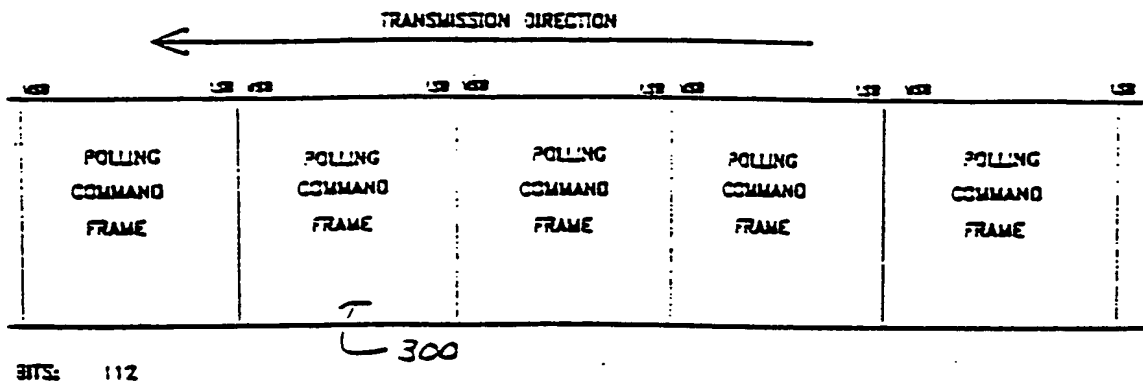


FIGURE 3A

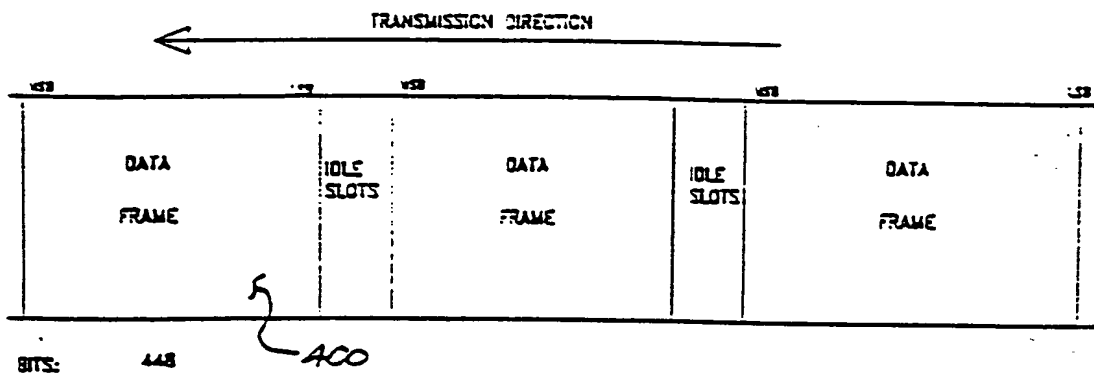


FIGURE 3B

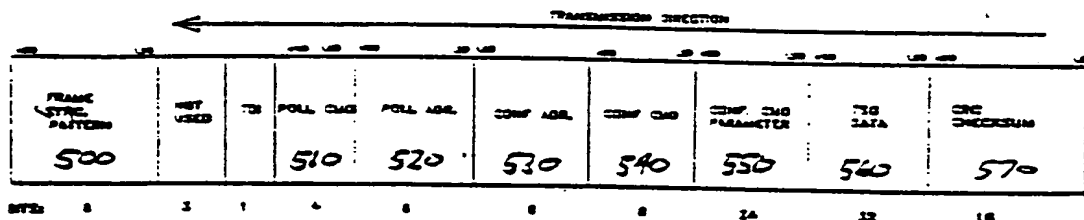


FIGURE 3C

09153864 091638

09163864 091698

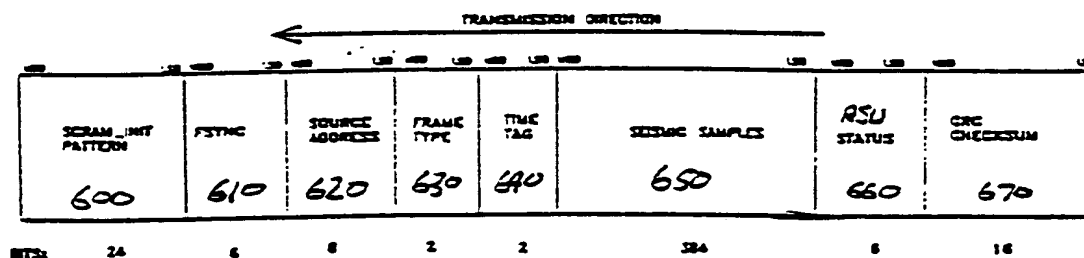


FIGURE 3D

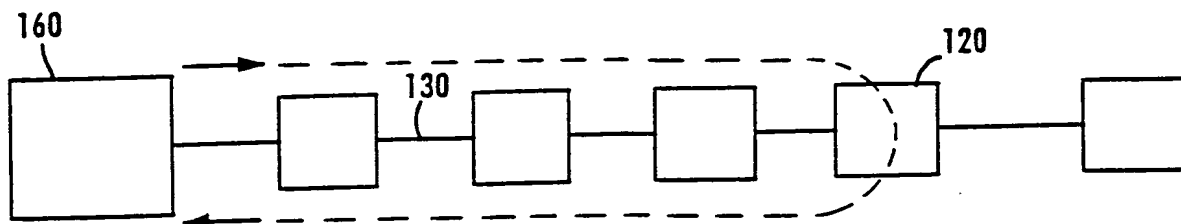


Figure 4

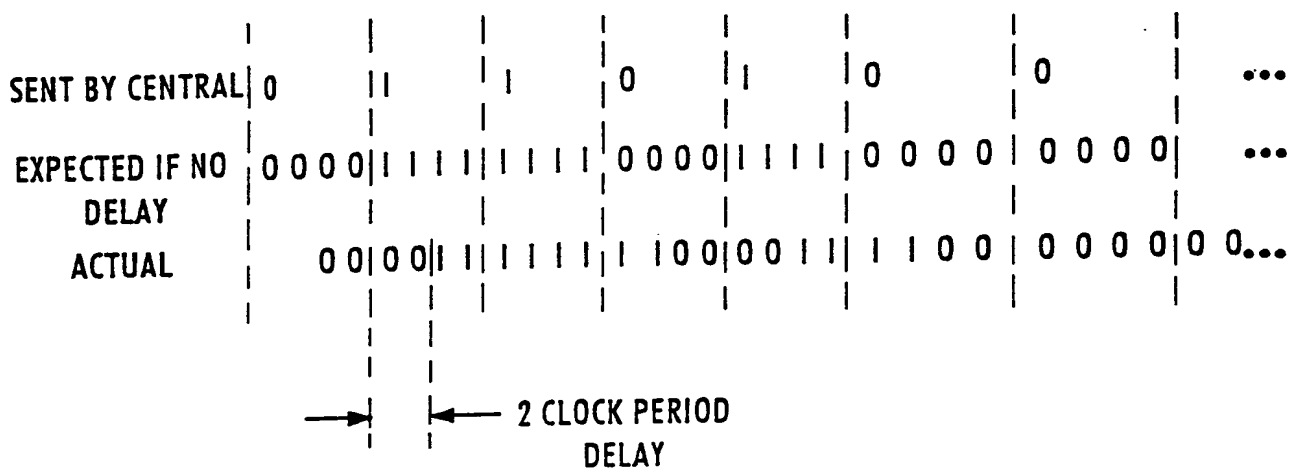


Figure 5

09153864-091599
009169-4985160

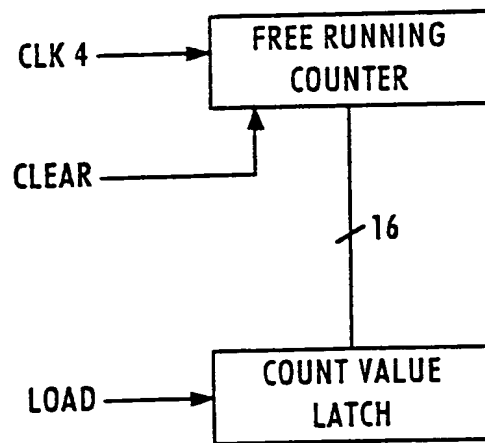


Figure 6A

Poll Sequence

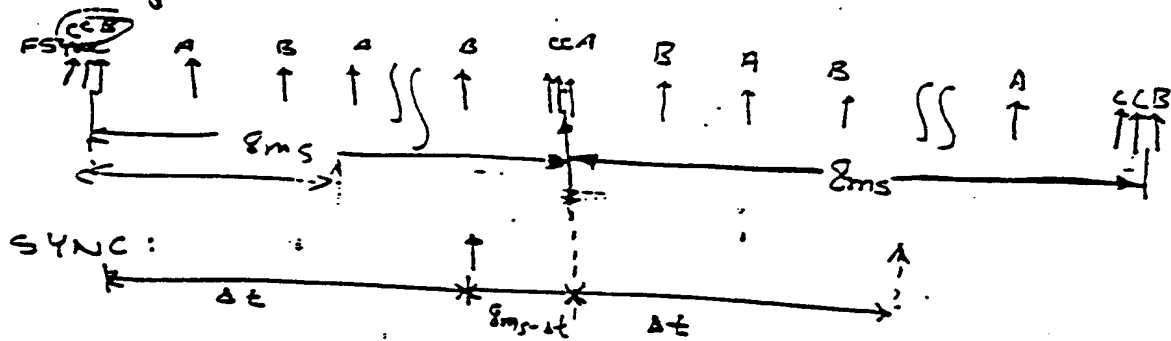


FIGURE 6B

869T60-1985T60

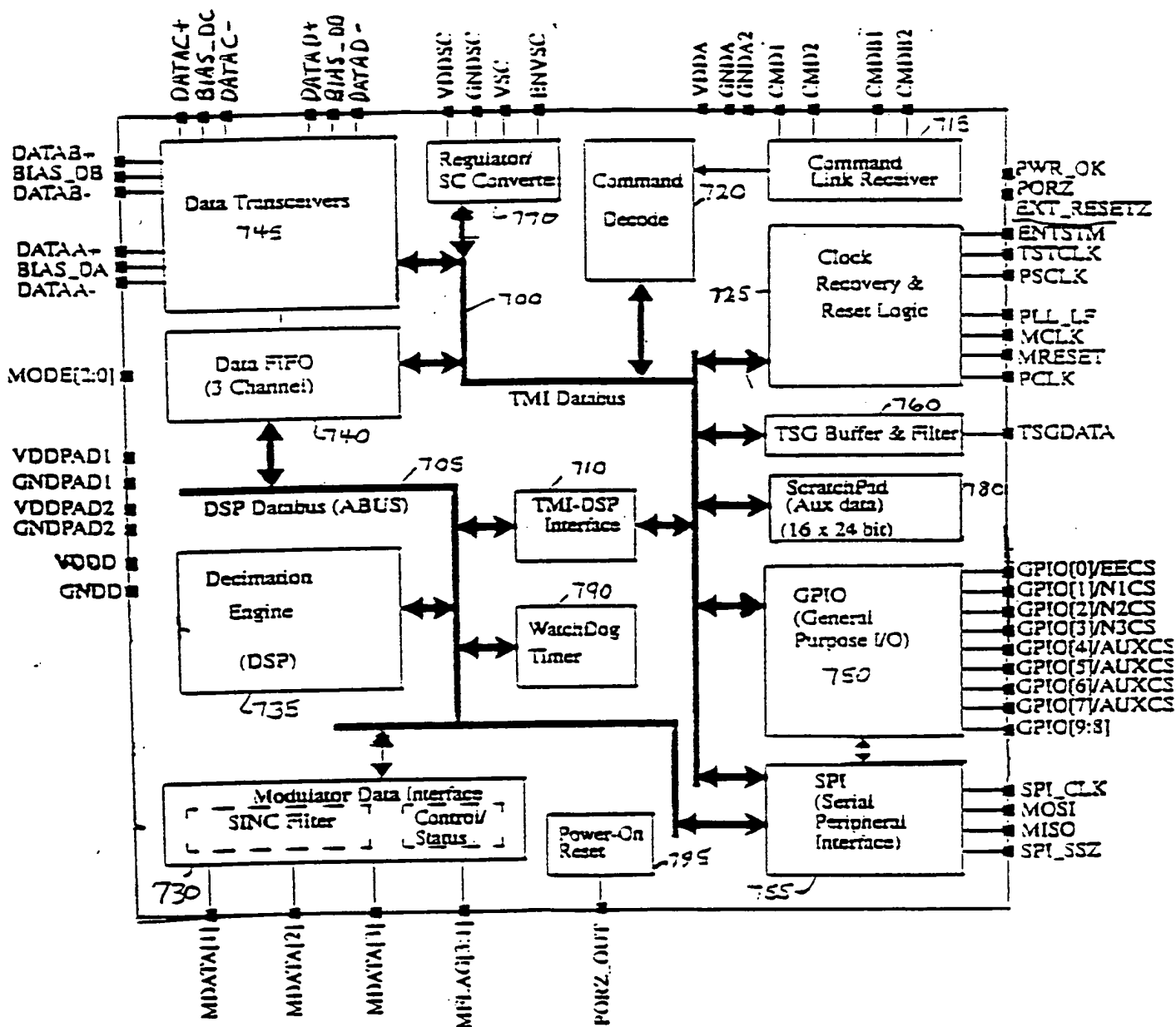


FIGURE 7

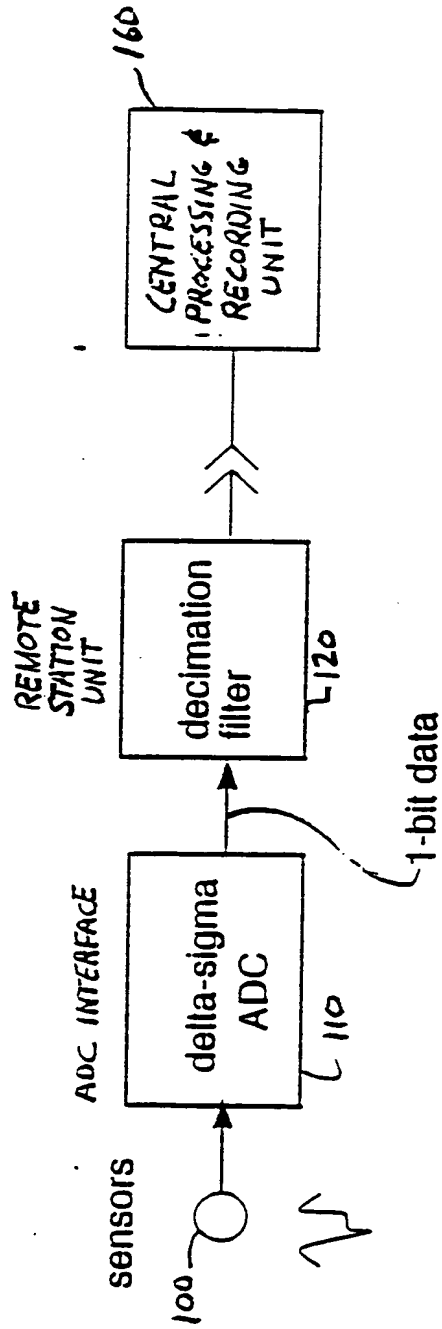


FIGURE 8

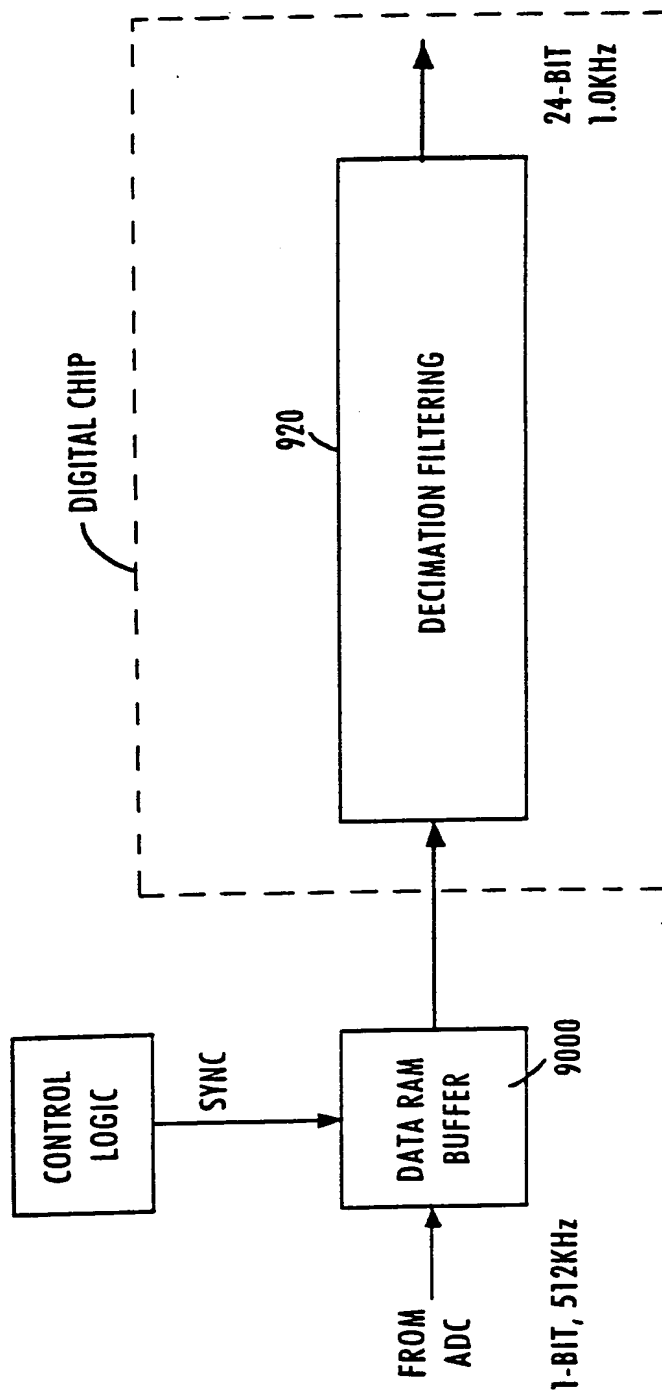


Figure 9 (PRIOR ART)

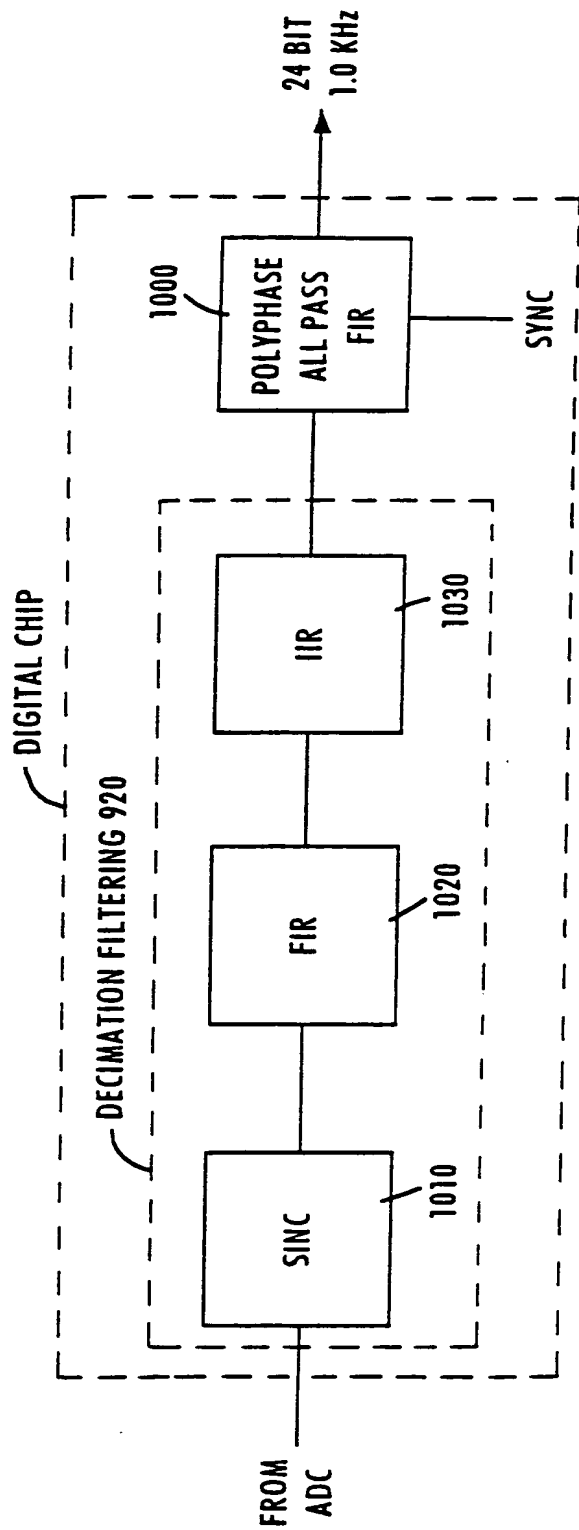


Figure 10

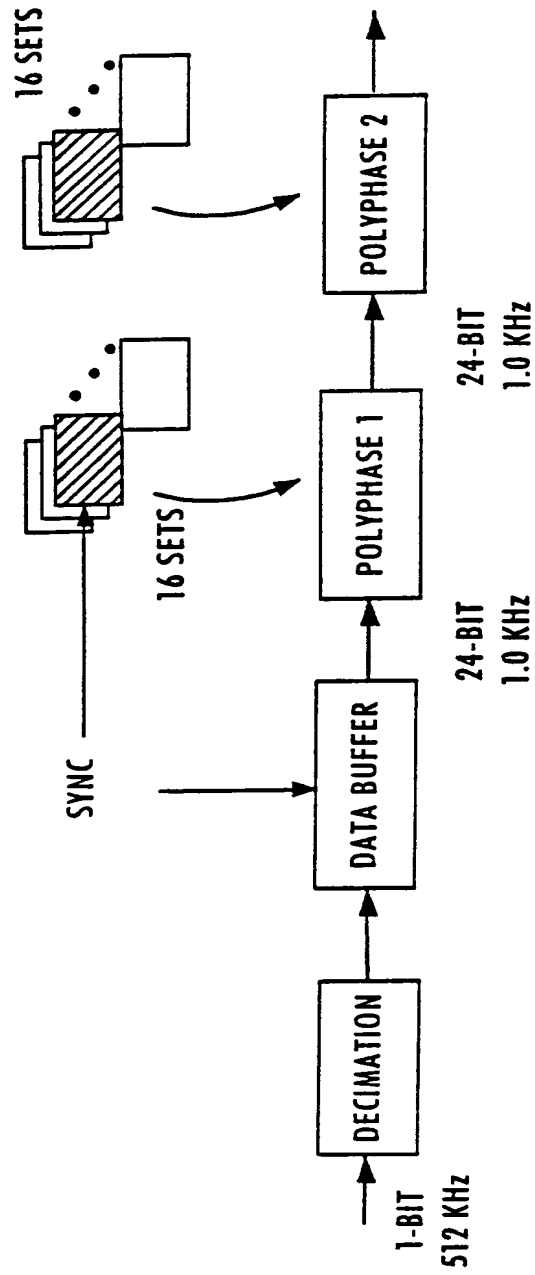


Figure 11

00153864 09168
869T60 498E5T60

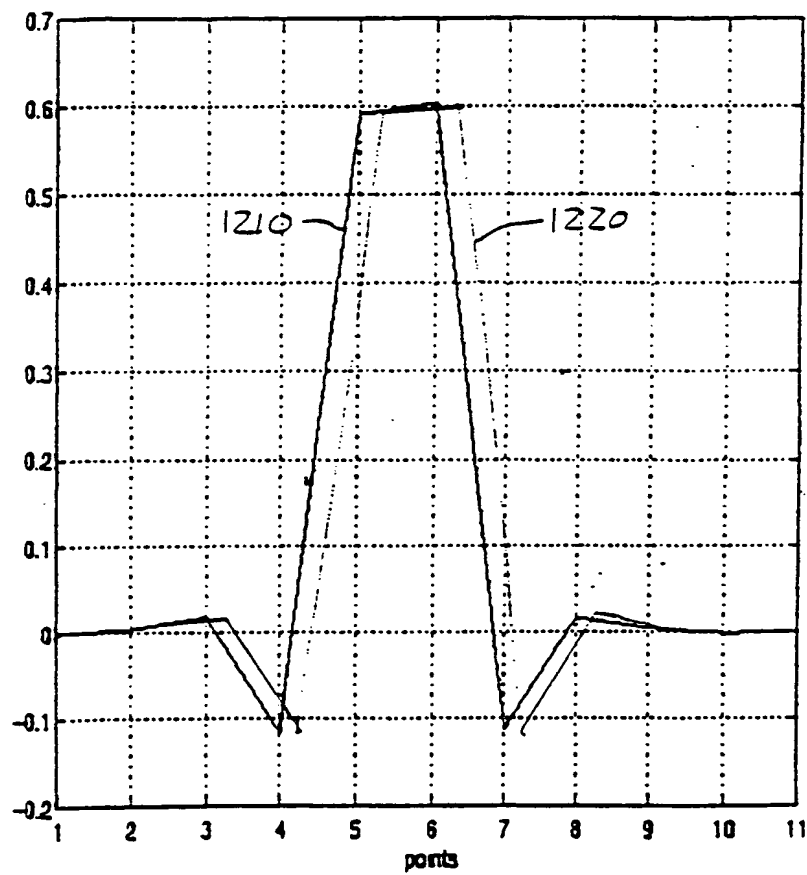
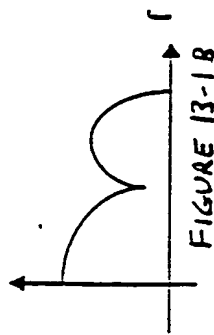
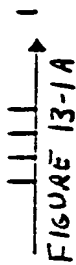


FIGURE 12

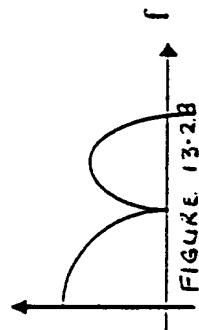
1st order sinc filter



$$H(Z) = \frac{(1 - Z^{-4})}{(1 - Z^{-1})}$$

FIGURE 13-1C

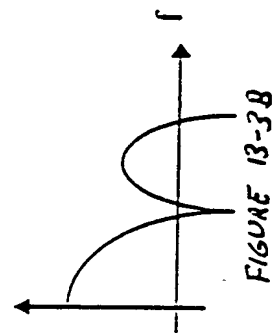
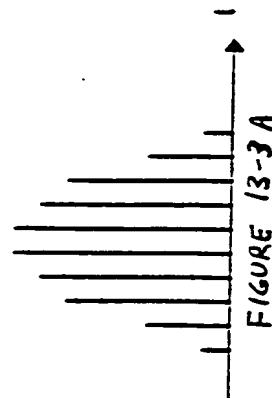
2nd order sinc filter



$$H(Z) = \frac{(1 - Z^{-4})^2}{(1 - Z^{-1})^2}$$

FIGURE 13-2C

3rd order sinc filter



$$H(Z) = \frac{(1 - Z^{-4})^3}{(1 - Z^{-1})^3}$$

FIGURE 13-3C

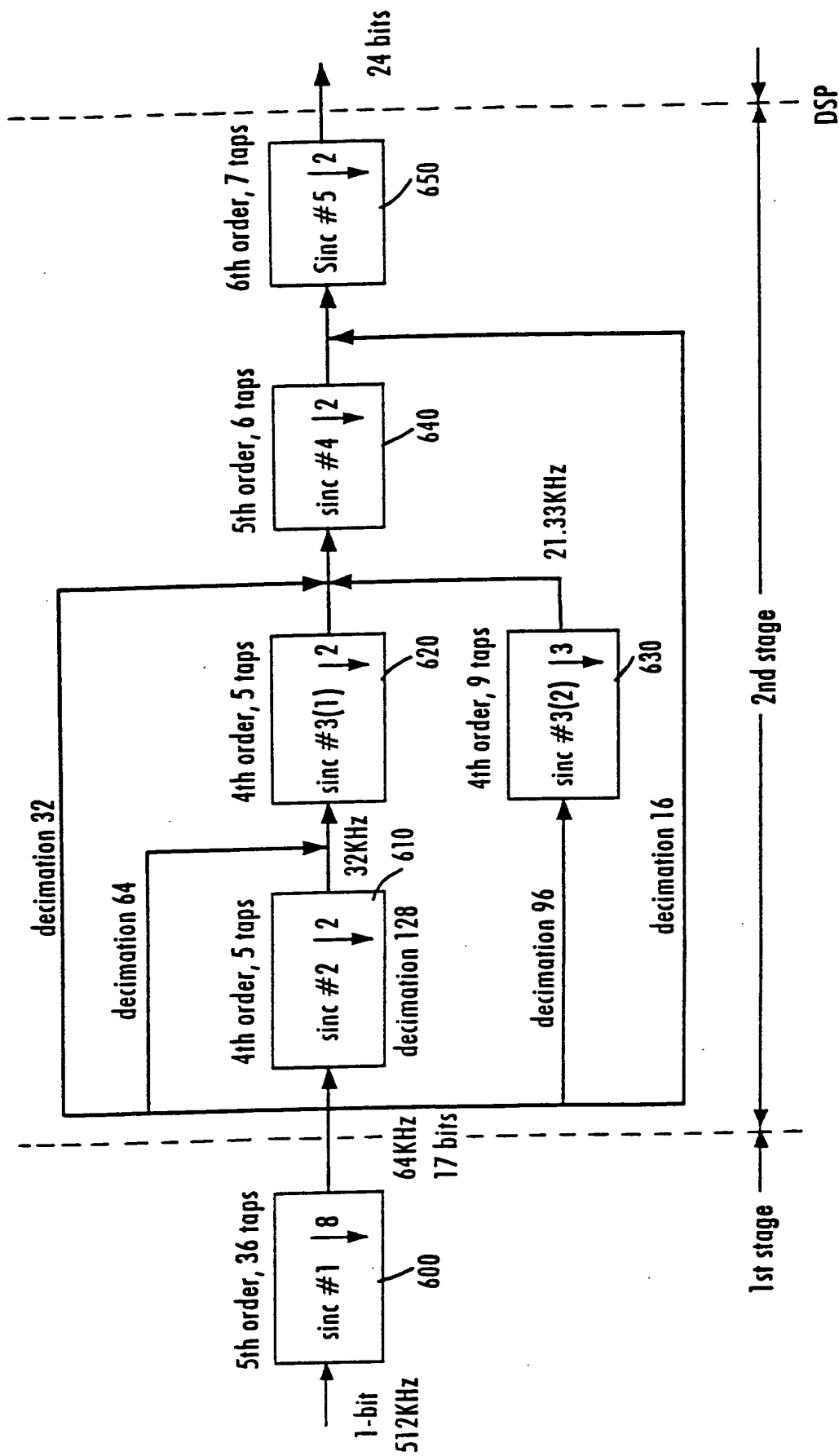


Figure 14

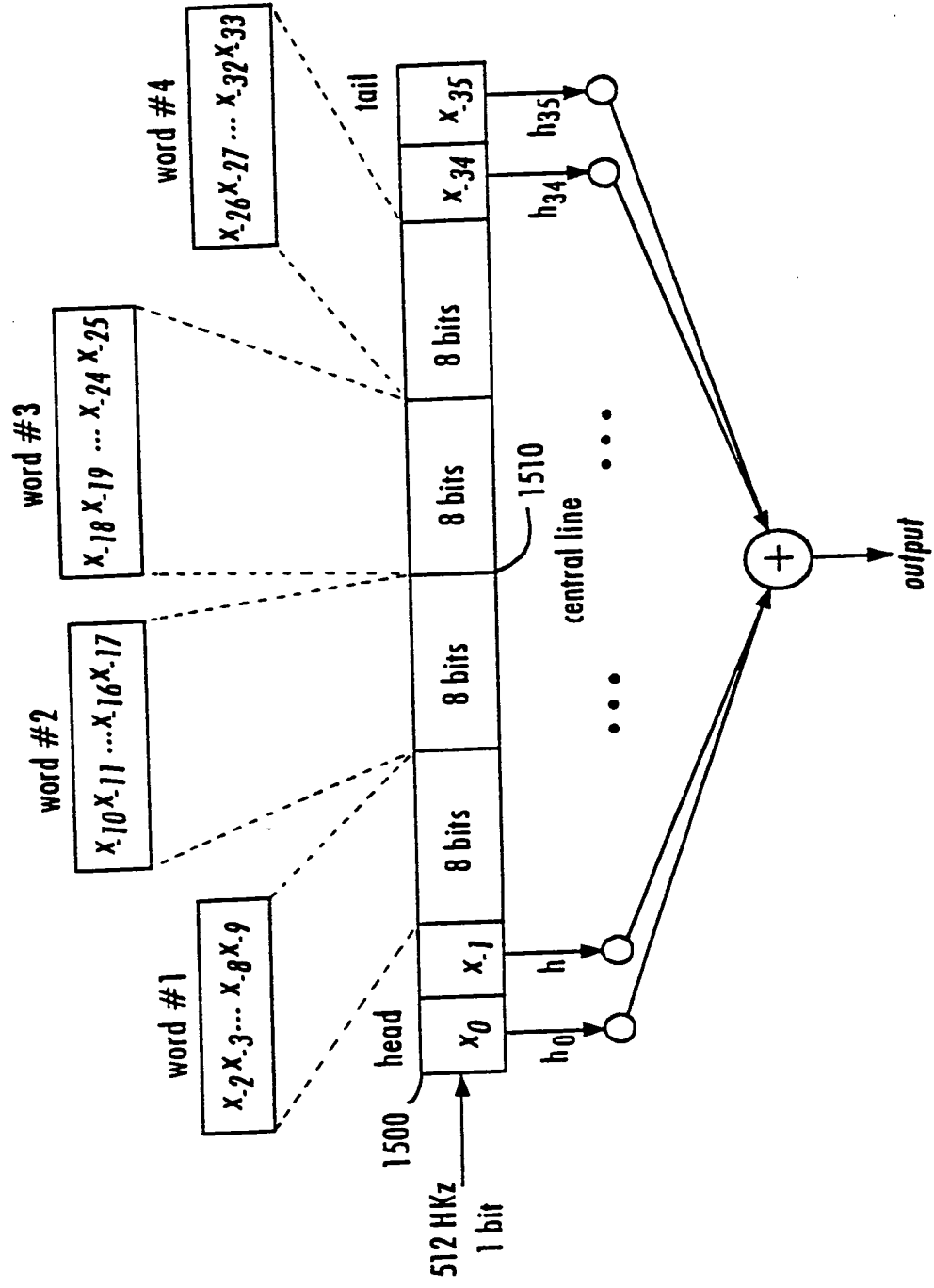


Figure 15

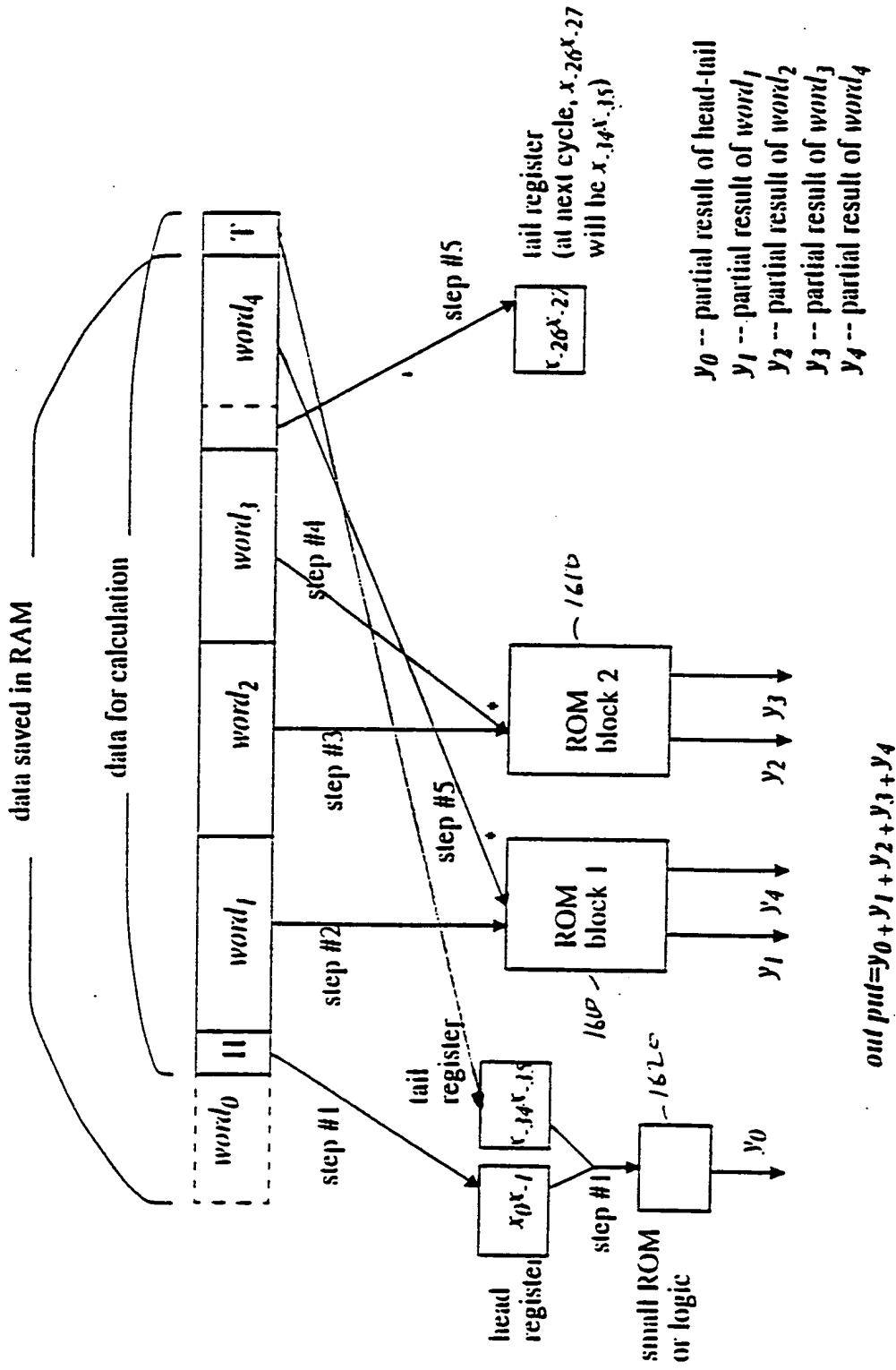


FIGURE 16

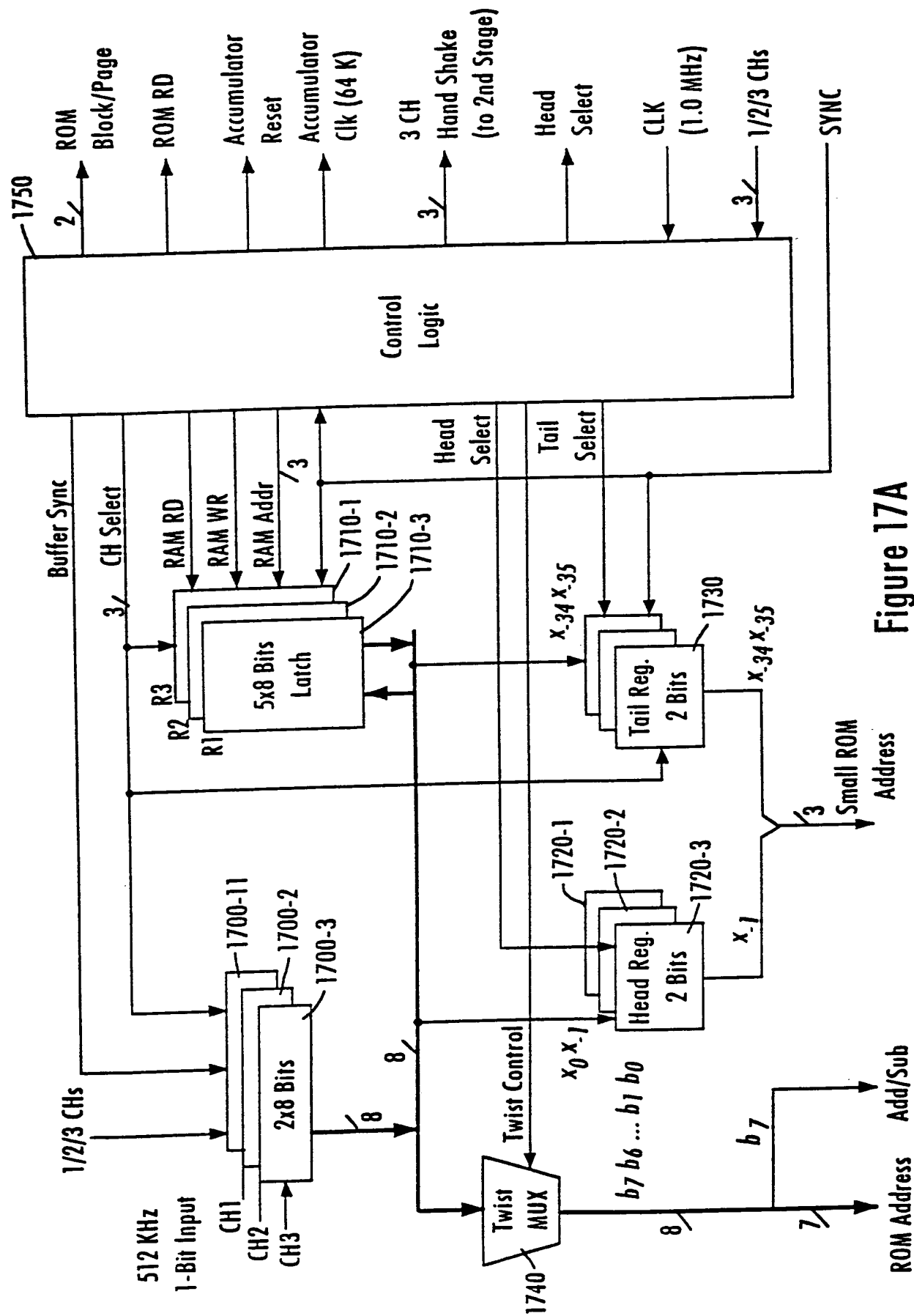


Figure 17A

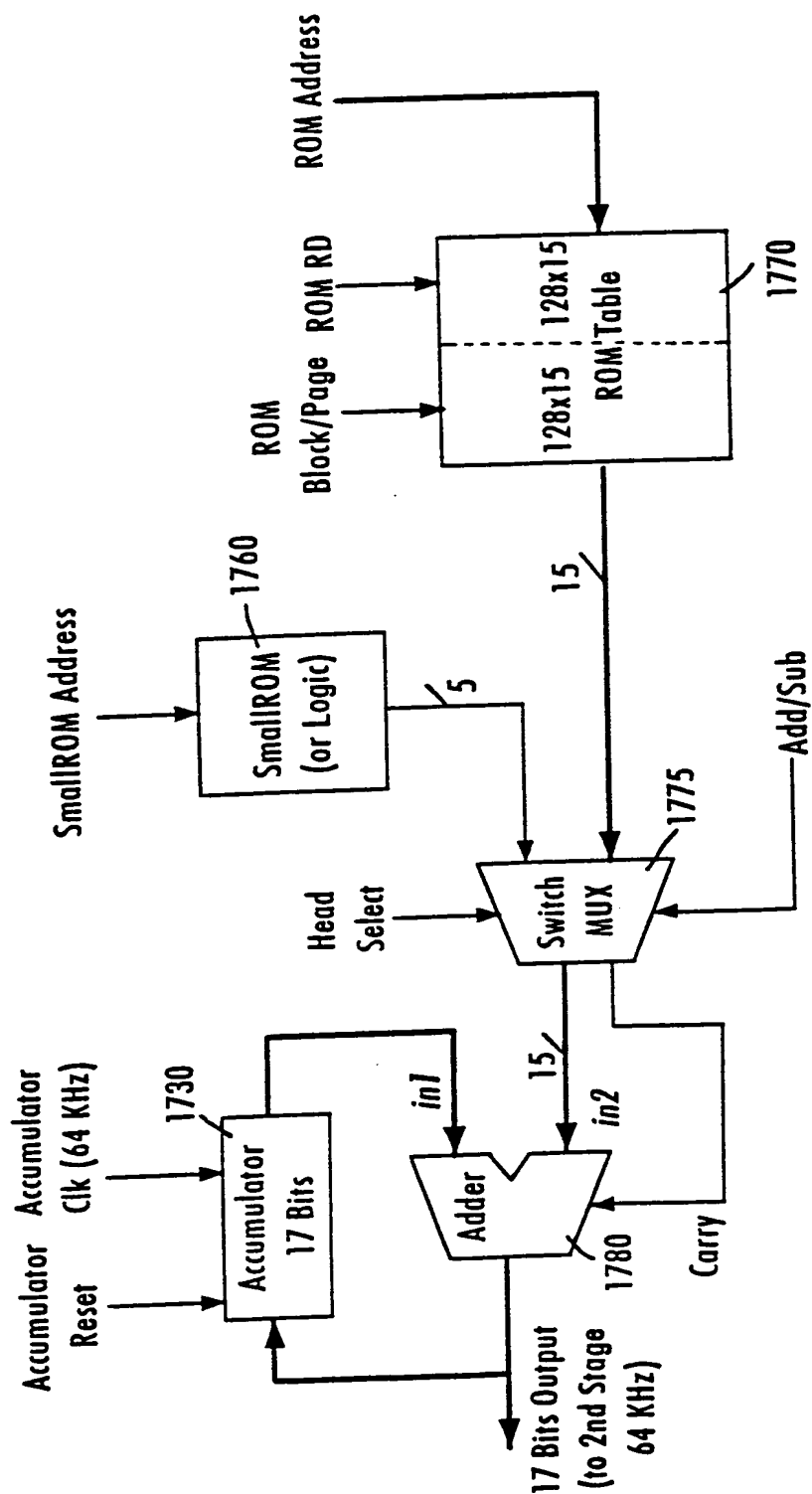


Figure 17B

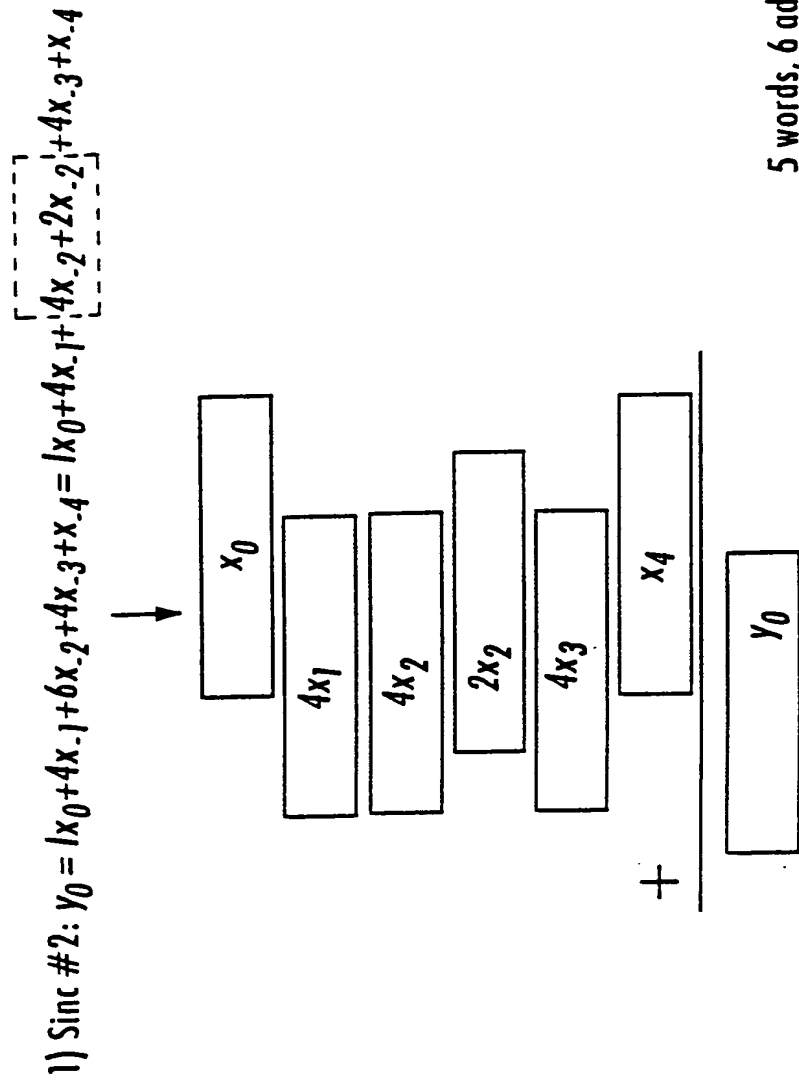


Figure 18A

Fig. 188-1 Sinc#3(1) = sinc#2

5 words, 6 additions

$$\begin{aligned} \text{Fig. 188-2 Sinc\#3(2): } & x_0 + 4x_{-1} + 10x_{-2} + 16x_{-3} + 19x_{-4} + 16x_{-5} + 10x_{-6} + 4x_{-7} + x_{-8} \\ & = x_0 + 4x_{-1} + \boxed{8x_{-2} + 2x_{-2}} + \boxed{16x_{-3} + 16x_{-4} + 2x_{-4} + x_{-4}} + \boxed{16x_{-5} + 8x_{-6} + 2x_{-6} + 4x_{-7} + x_{-8}} \end{aligned}$$

9 words, 13 additions

Fig. 188-3 Sinc#4: $x_0 + 5x_{-1} + 10x_{-2} + 10x_{-3} + 5x_{-4} + x_{-5}$

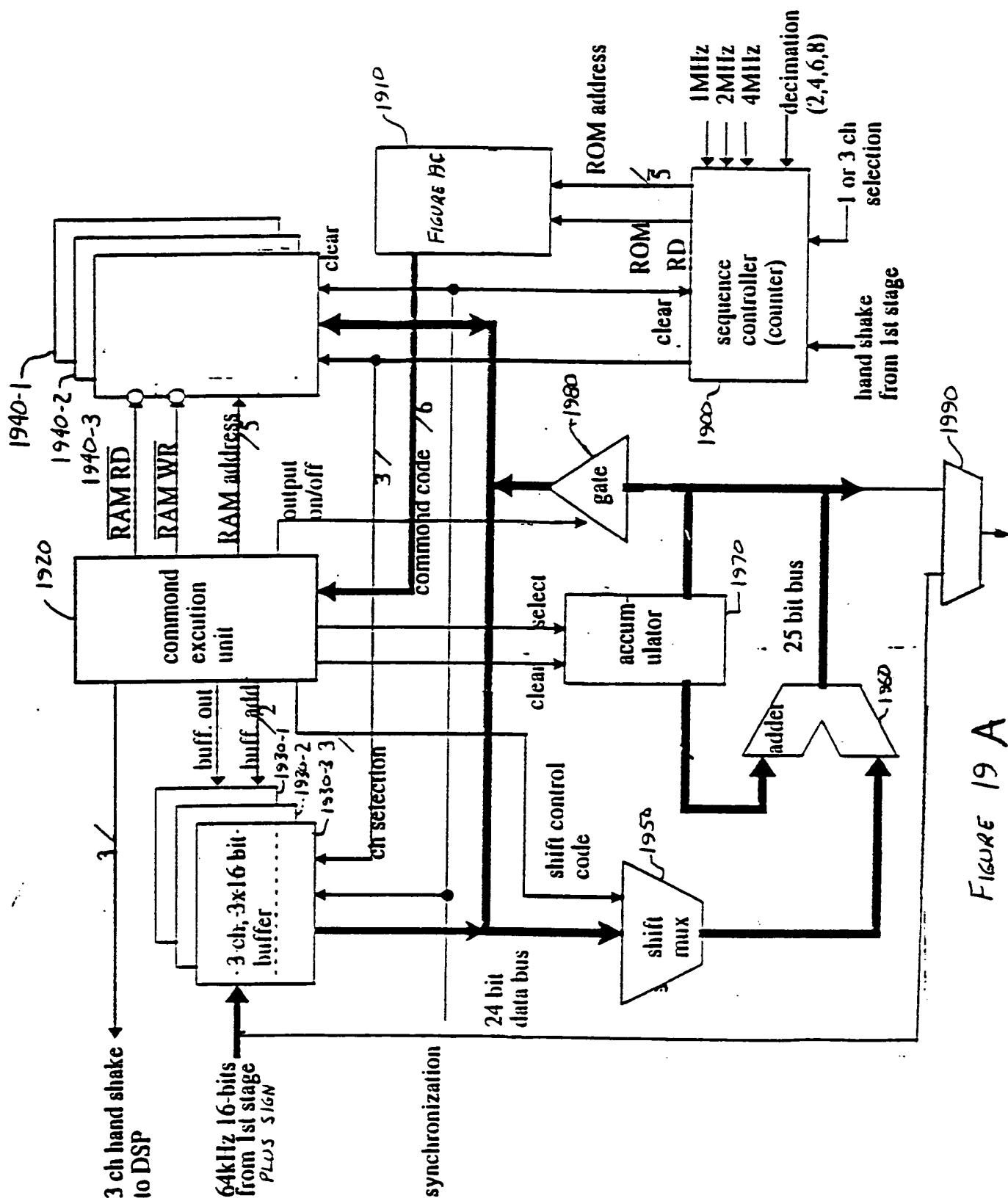
$$= x_0 + \boxed{4x_{-1} + x_{-1}} + \boxed{8x_{-2} + 2x_{-2}} + \boxed{8x_{-3} + 2x_{-3}} + \boxed{4x_{-4} + x_{-4} + x_{-5}}$$

6 words, 10 additions

Fig. 188-4 Sinc#5: $x_0 + 6x_{-1} + 15x_{-2} + 20x_{-3} + 15x_{-4} + 6x_{-5} + x_{-6}$

$$= x_0 + \boxed{4x_{-1} + 2x_{-1}} + \boxed{16x_{-2} - x_{-2}} + \boxed{16x_{-3} + 4x_{-3}} + \boxed{16x_{-4} - x_{-4}} + \boxed{4x_{-5} + 2x_{-5} + x_{-6}}$$

7 words, 12 additions



Programmable Main-Routine and Sub-Routine, Decimate by 8

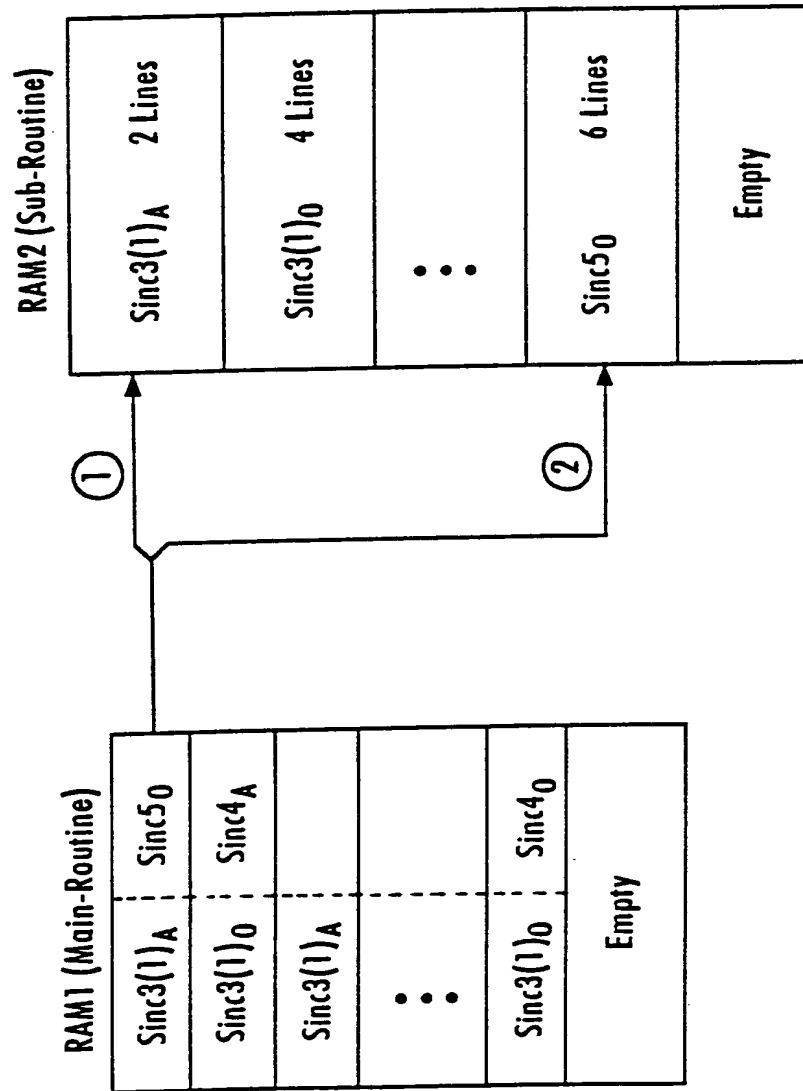


Figure 19B

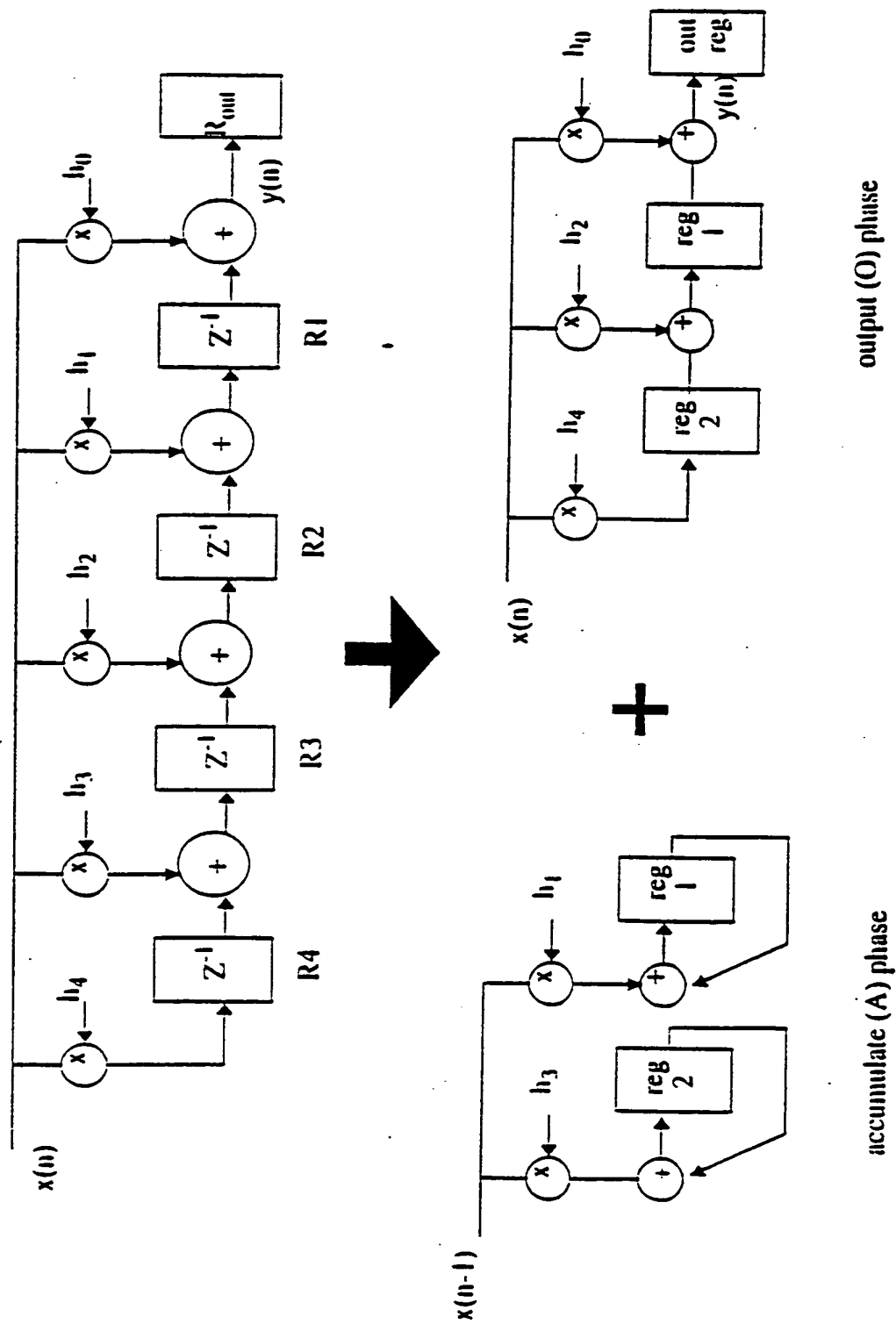


FIGURE 20

Figure 21A

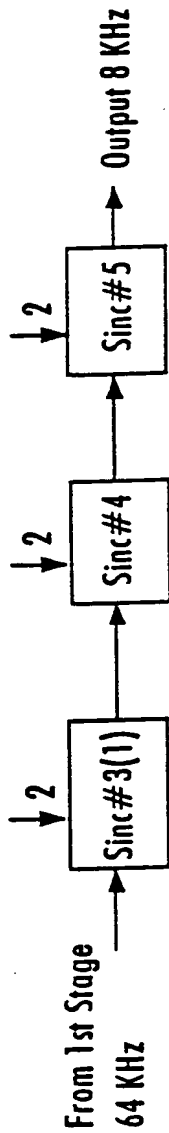


Figure 21B

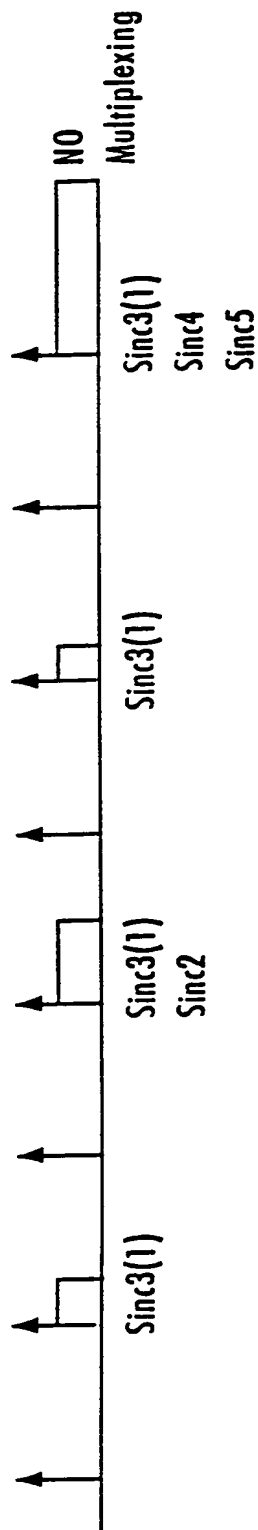


Figure 21C

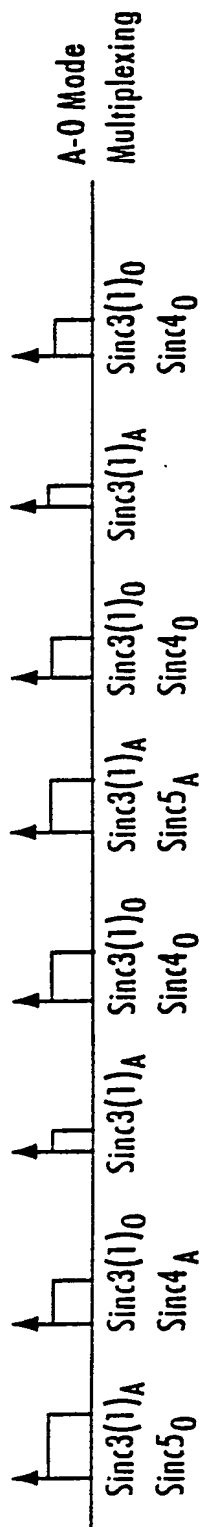
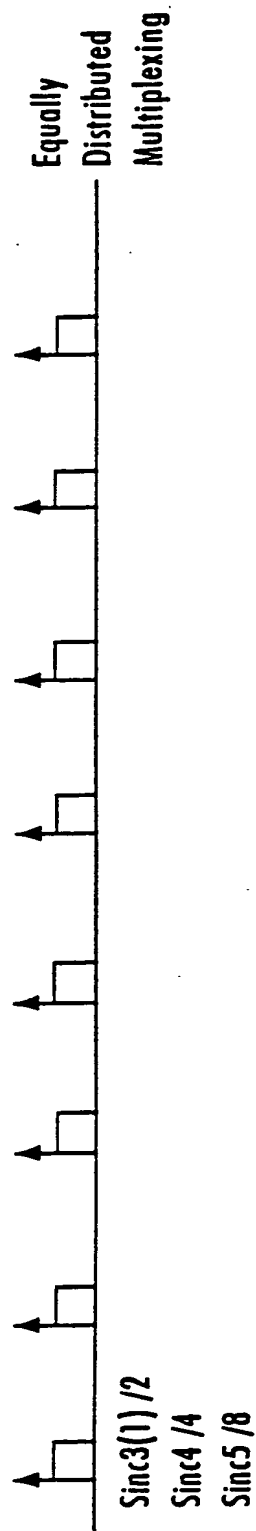


Figure 21D



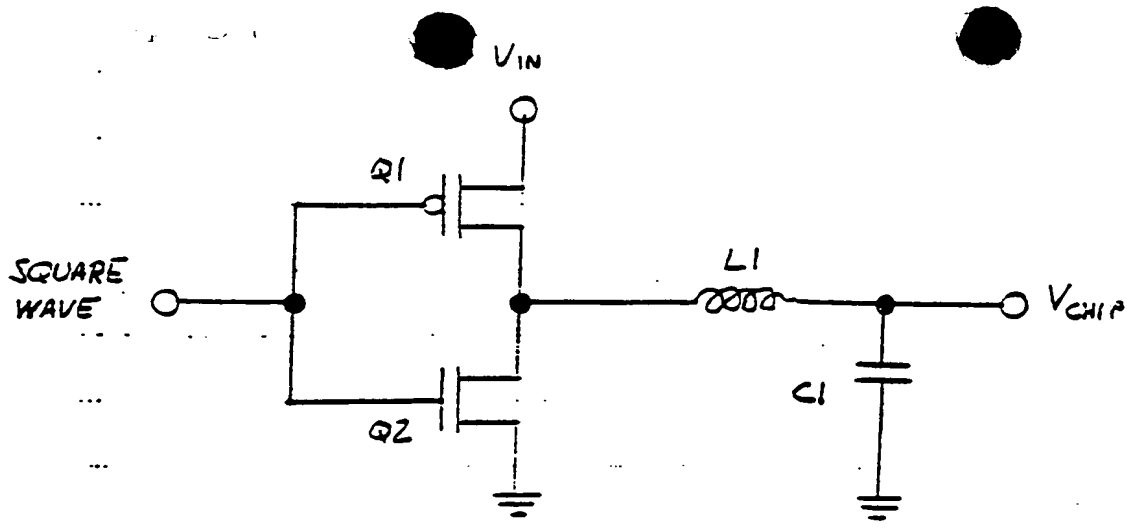


FIGURE 22 (PRIOR ART)

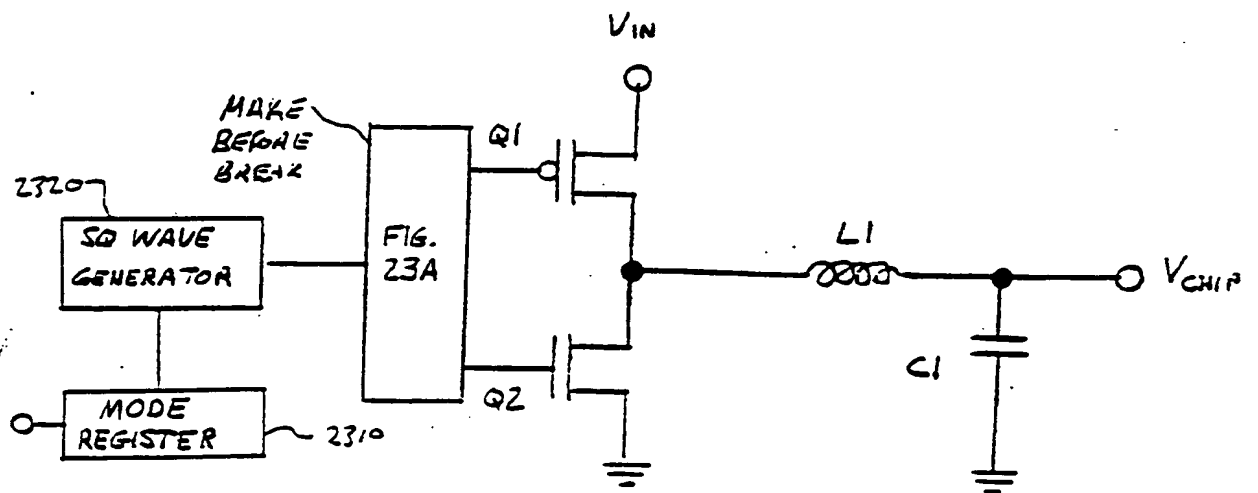


FIGURE 23

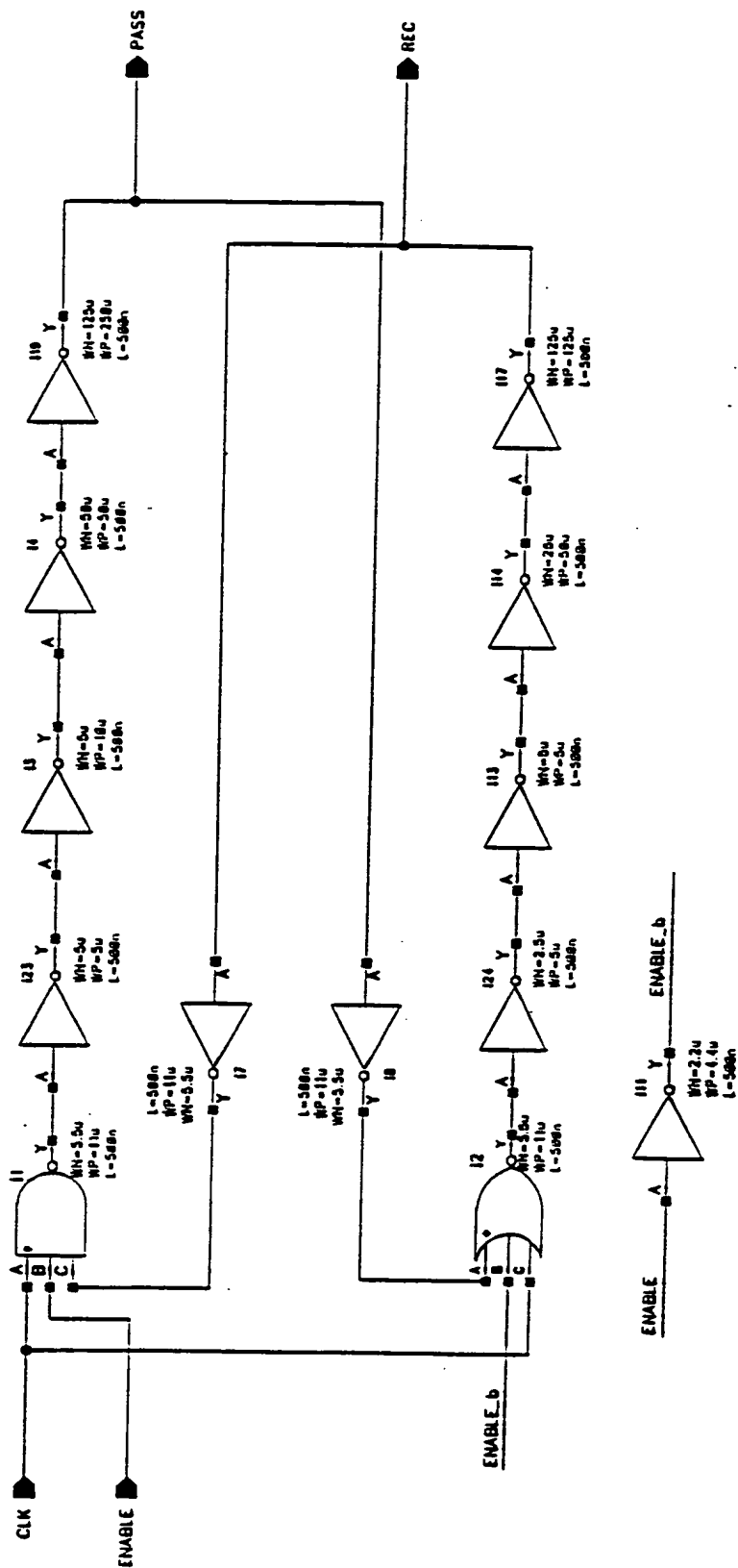


FIGURE 24

09153364-091699

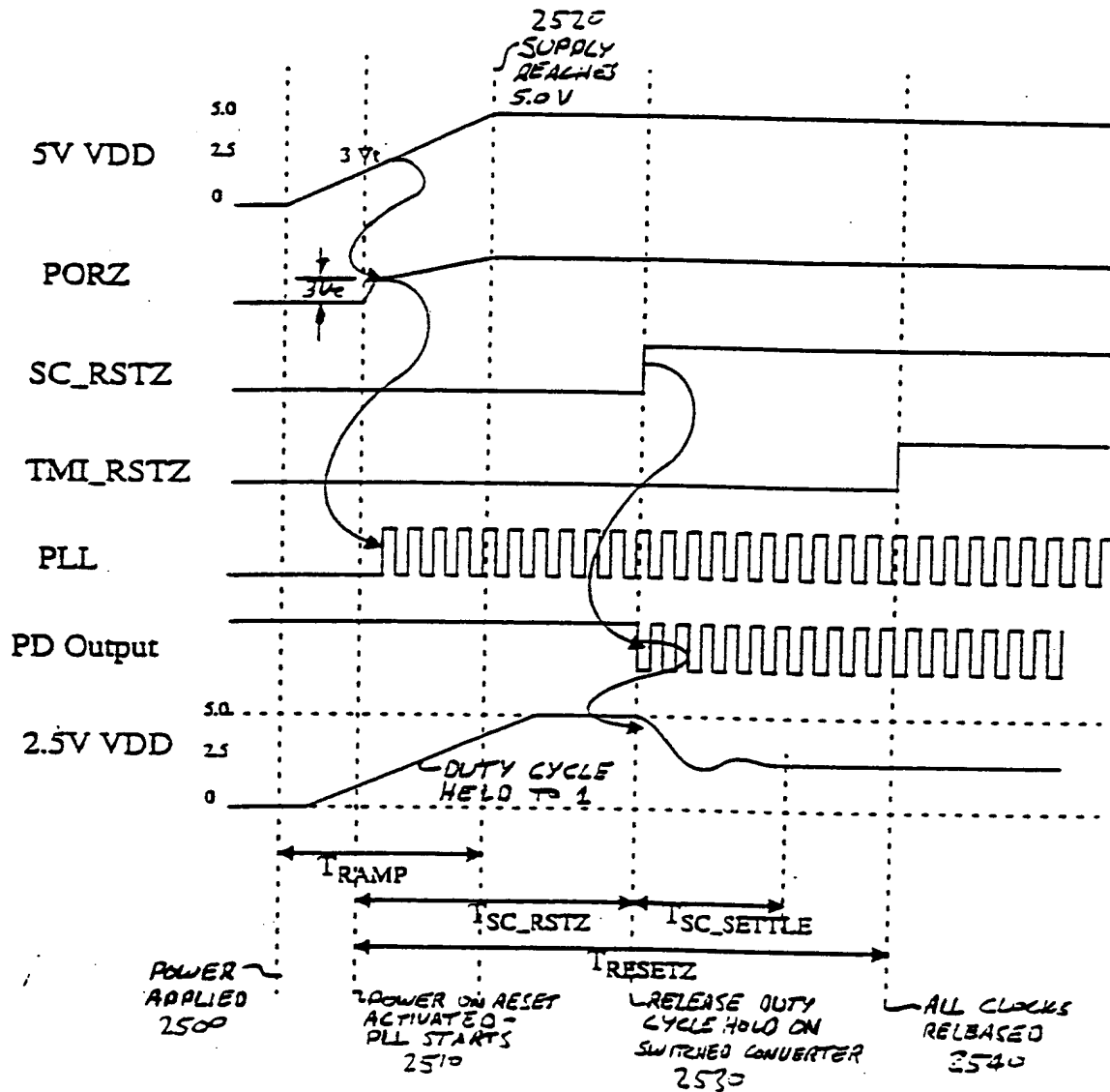


FIGURE 25

009T60-49825T60

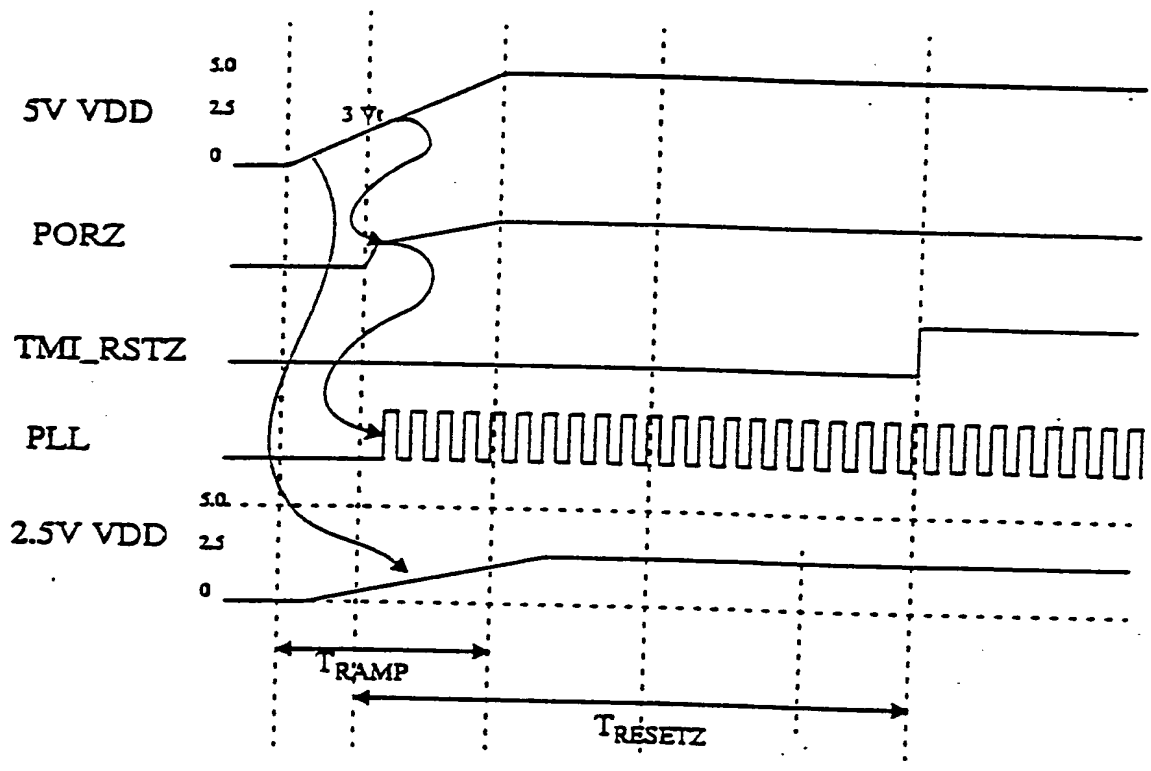


FIGURE 26

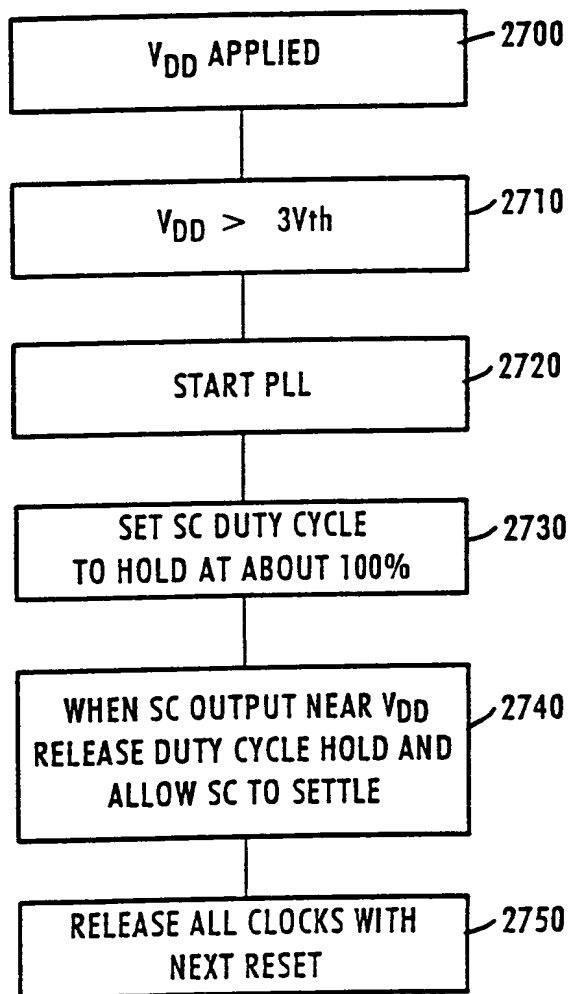
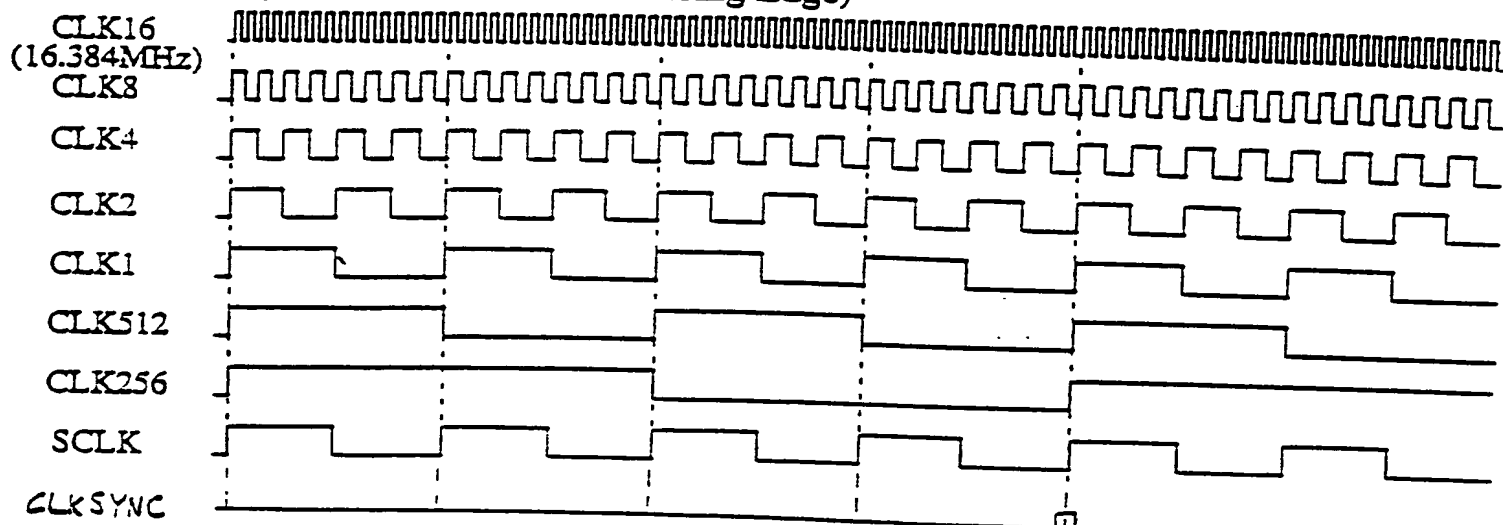


Figure 27

FIGURE 28

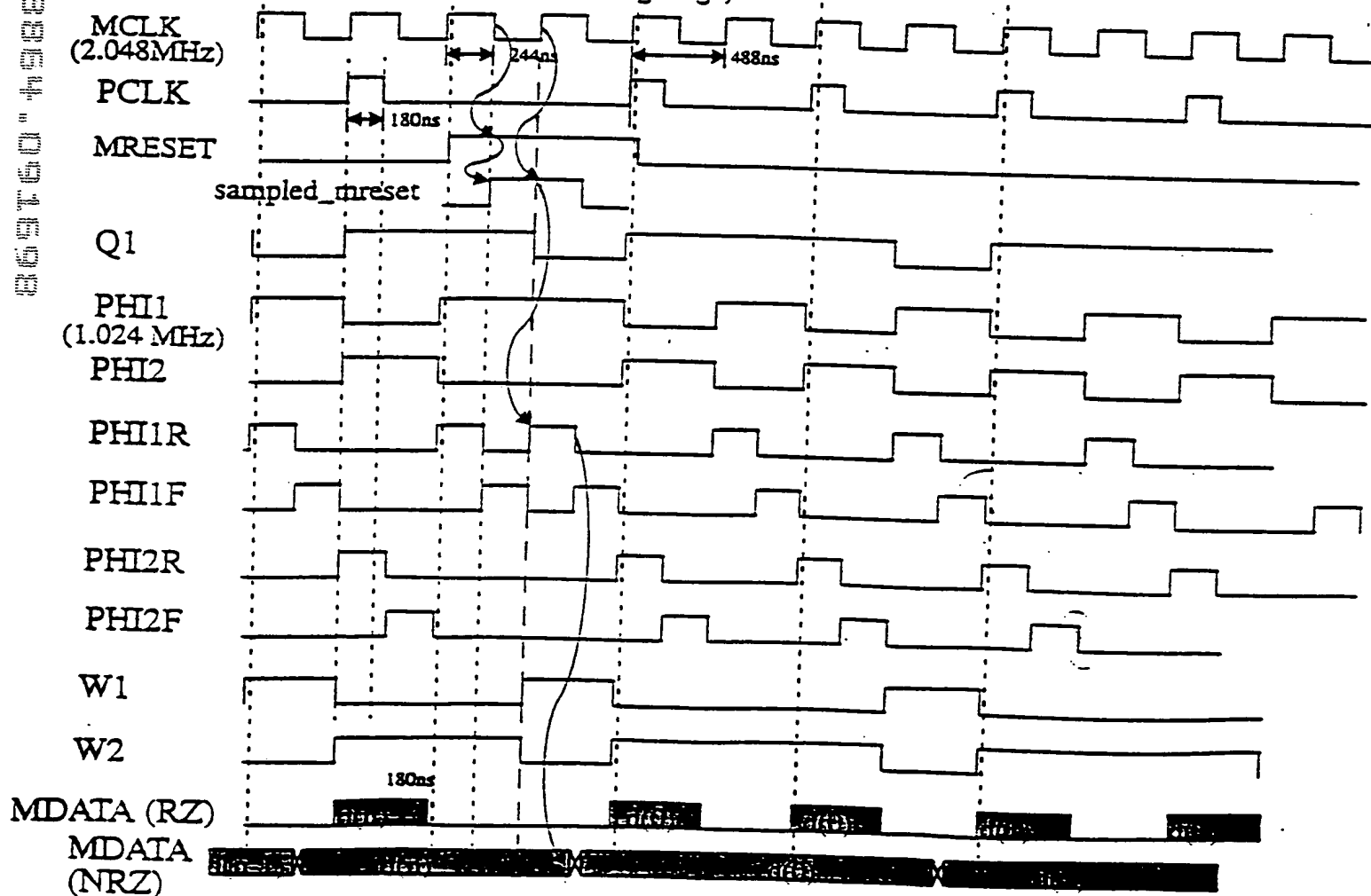
RSU & ADC interface Clock Relationships with SYNC

RSU Clocks (Created from CLK16 Rising Edge)



ADC Clocks (created from CLK16 Falling Edge)

09153864-091590



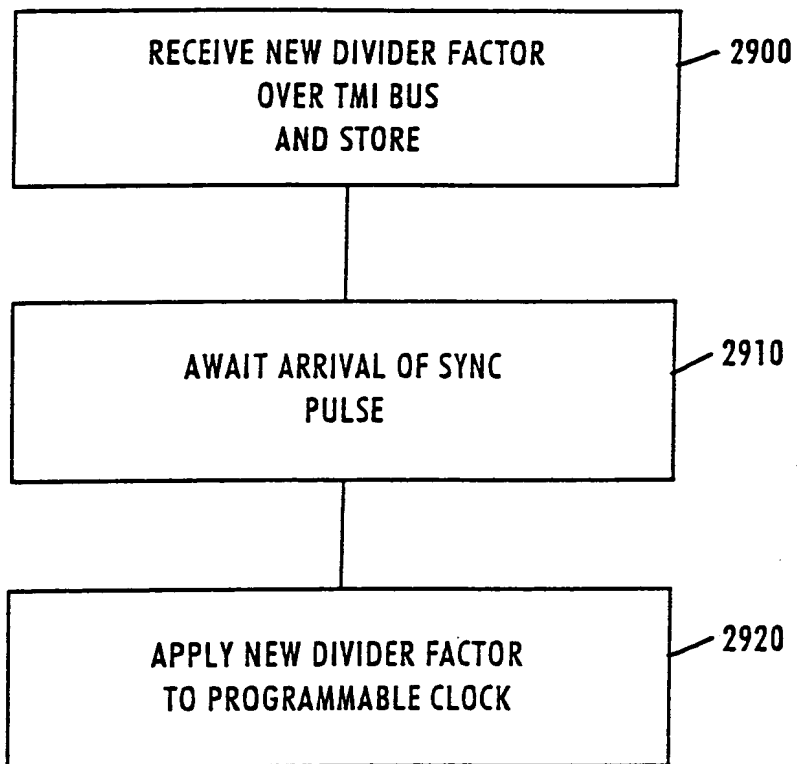


Figure 29

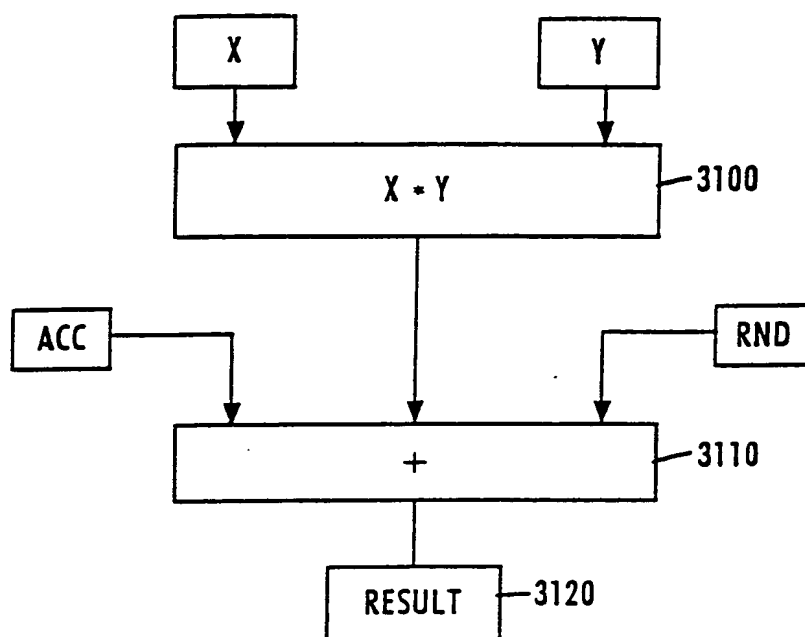


Figure 31

$$X * Y + ACC + RND$$

Figure 30

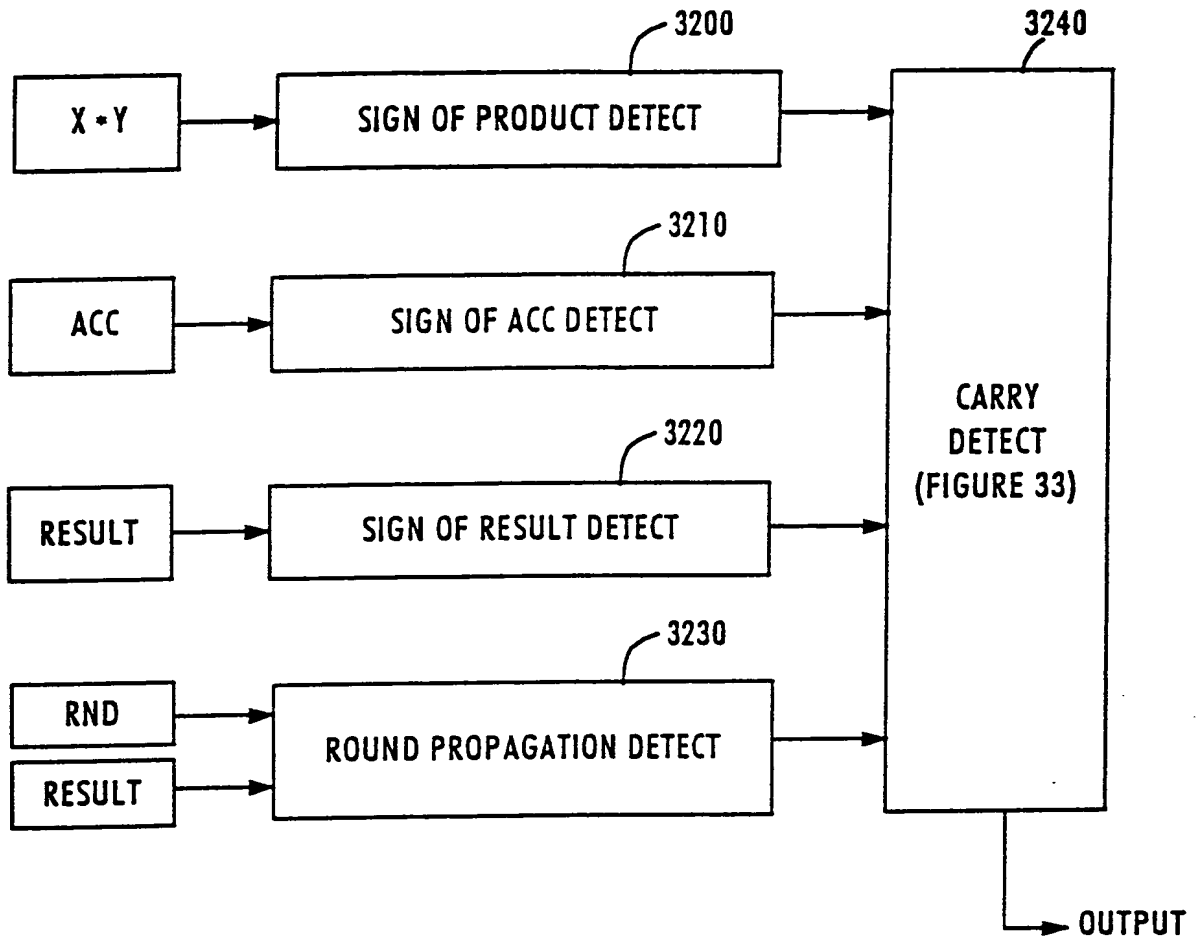


Figure 32

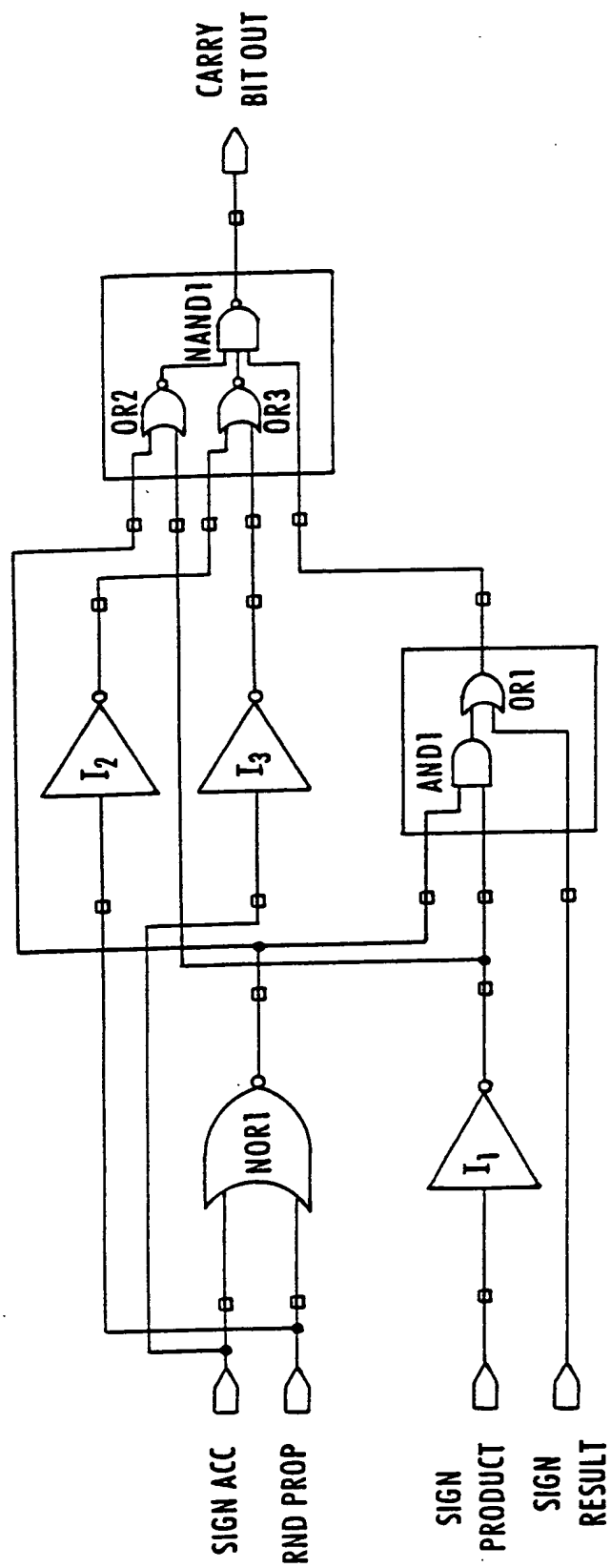


Figure 33